WHAT IS CLAIMED IS :

1. A method for the conveying of data between several users A, B, in a communications network comprising at least one low-bit-rate artery and one or more lines working at standard bit rates, the network comprising a

5 basic transmission unit, such as a cell, and at least one adaptation layer protocol, the data to be transmitted taking the form of packets Pi having a size smaller than the size of the basic transmission unit, the method comprising at least the following steps:

• extracting the packets Pi from the upstream and/or downstream cells of a
10 low-bit-rate artery (steps(4a) or (5a)),

• inserting said packets according to a given adaptation layer protocol, in the cells of a virtual circuit set up between the ends of the low-bit-rate artery (steps (4b)), or between the users (steps (5b) and (5c)).

2. A method according to claim 1, comprising a multiplexing of data from a
15 same user or from different users, upstream to the low-bit-rate artery and/or a demultiplexing operation downstream from the low-bit-rate artery.

3. A method according to claim 1, wherein the cells are diverted before the steps of extraction (step (4a)) and insertion (step (4b)) and the cells coming from the step (5c) are injected into virtual circuits set up among users.

20 4. A method according to one of the claims 1 to 3, using the AAL2 protocol for inserting the packets.

5. A method according to one of the claims 1 to 4 comprising a step preliminary to the extraction of the packets in which:

• (2a) the data are converted into frames by using a compression algorithm,

25 • (2b) a packet of applications data is formed out of a fixed number of successive frames and signalling data if any,

• (2c) a packet Pi is formed out of the data packet and a header,

• (2d) the packet Pi is inserted into a cell before it is put through the step (4a).

6. A method according to claim 5 comprising a step for the transportation of day by means of cells, prior to the step (2a), according to an AAL1 type protocol between the user sending the data and an adaptation unit (4).

7. A method according to one of the claims 1 to 4 comprising, downstream from a low-bit-rate artery, a step comprising:

 • (5b) the determining of the connection to which the packets Pi belong,

 • the inserting of the packets into cells for transmission or the performance of the step (4b) if the downstream end of the artery corresponds to the upstream end of another low-bit-rate artery.

8. A method according to one of the claims 1 to 4 comprising, at the level of the addressee user, a step comprising at least :

 • (7a) the extraction of packets Pi from the cells,

 • (7b) the determining of the addressee user

 • (7c) the processing and checking of the information to obtain the initial data (sent by the sender user).

9. A method according to one of the claims 1 to 8, using the UUI field of the header of a CPS type packet Pi to check the integrity of the data sent between two users in communication.

10. An application of the method according to any of the claims 1 to 9 to the transfer of data in the video format, for digital voice transmission and the like.

11. A device for data switching between several users A, B for a communications network comprising at least one low-bit-rate artery and one or more standard-bit-rate arteries, the network comprising a basic transmission unit, such as a cell, and supporting at least one adaptation layer protocol, wherein the device comprises at least one multiplexer device adapted to the switching of packets Pi conveyed in the cells according to the adaptation protocol among several virtual lines constituted by connections in multiplexed or non-multiplexed mode.

12. A device according to claim 11 comprising at least the following elements:

- a shuffler to transmit a cell to the multiplexer and carry out a transparent switching of the cells that do not have to travel through a low-bit-rate artery,

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- a means to extract the packets Pi from the cells travelling through a low-bit-rate artery and for cell packetization, for each virtual artery ,

- a means for the shunting of the packets received from the means and a table adapted to determining the cell exit virtual artery.

13. A device according to claim 12, used in a network supporting a, AAL2 type adaptation protocol.

10 14. A device according to any of the claims 12 or 13, wherein the switching device is an ATM switch equipped with a multiplexer whose role is to switch CPS packets among several virtual arteries constituted by ATM connections in multiplexed or non-multiplexed AAL2 mode.

15. A network to convey data among several users A, B, the network
15 comprising one or more low-bit-rate arteries and one or more standard-bit-rate arteries, at least one adaptation layer protocol and one basic transmission unit such as a cell, wherein the network comprises at least one switching device according to one of the claims 11 to 14, this device being positioned upstream to and/or downstream from a low-bit-rate artery.

20 16. A communications network according to claim 15, comprising one or more ATM switches.